

IN THE CLAIMS:

Please amend the claims as follows. This listing of the claims will replace all prior versions, and listings, of claims in the application:

1 - 21 (Canceled)

22. (Currently Amended) A method for controlling heating processes in a coffee machine, which is suitable for preparing coffee on the basis of coffee pads, wherein the coffee machine comprises a continuous flow heater having an adjustable heating power and a pump for conveying water through the continuous flow heater, the method comprising the acts of:

~~measuring a first temperature in at least one of the area of the continuous flow heater and the water conveyed by the pump; and~~

~~influencing the amount of water conveyed by the pump in response to the first temperature.~~

measuring a first temperature between the continuous flow heater and a brewing chamber;

measuring a second temperature between the pump and the continuous flow heater; and

influencing at least one of the amount of water conveyed by the pump and the heating power in response to the first and second temperatures.

23. (Canceled)

24. (Canceled)
25. (Canceled)
26. (Previously Presented) The method according to claim 22, wherein the amount of water conveyed by the pump is influenced by a pulsed operation of the pump.
27. (Previously Presented) The method according to claim 26, wherein the pump is switched on before the beginning of heating and is operated with a first cycle ratio between switch-on time and switch-off time, the first cycle ratio becoming larger with increasing temperature, and the first cycle ratio being above a predefined temperature threshold.
28. (Canceled)
29. (Currently Amended) An electronic control device for controlling heating process in a coffee machine for preparing coffee using coffee pads, the coffee machine comprising a continuous flow heater having an adjustable heating power and a pump for conveying water along a conveying section through the continuous flow heater and a plurality of temperature sensor sensors, a first temperature sensor disposed between the continuous flow heater and a brewing chamber, and a econd temperature sensor disposed between the pump and the continuous flow heater, wherein the electronic control device comprises means for influencing the amount of water conveyed by the pump in response to the ~~temperature~~ temperatures measured by the first and second ~~temperature sensor~~ sensors.

30. (Previously Presented) The electronic control device according to claim 29, wherein the means for influencing the amount of water conveyed includes clocked operation of the pump.

31. (Canceled)

32. (Previously Presented) The electronic control device according to claim 29, wherein the means for influencing the amount of water conveyed includes a restrictor.

33. (Previously Presented) The electronic control device according to claim 32, wherein the restrictor includes a slider disposed in the conveying section.

34. (Canceled)

35. (Currently Amended) The electronic control device according to claim 29 34, wherein the continuous flow heater includes a plurality of heaters and the means for influencing the heating power comprise a controller for switching on different numbers of the plurality of heaters.

36. (Canceled)

37. (Canceled)

38. (Canceled)

39. (Canceled)

40. (Canceled)

41. (Canceled)

42. (Currently Amended) The electronic control device according to claim 29
40, wherein the electronic control device comprises a differential element for determining
the temperature difference between the first and second temperature sensors a
~~temperature measured by a temperature sensor located upstream of the continuous flow~~
~~heater and a temperature measured by a temperature sensor located downstream of the~~
~~continuous flow heater for influencing the amount of water conveyed by the pump.~~